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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/822,906 | 03/29/2001 | Alireza Raissinia | CISCP672 | 9028 |
| 26541 | 7590 | 10/07/2004 | EXAMINER | |
| RITTER, LANG & KAPLAN 12930 SARATOGA AE. SUITE D1 SARATOGA, CA 95070 | | | WAHBA, ANDREW W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2661 | |

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--|--|
| Office Action Summary | Application No. 09/822,906 | Applicant(s) dk RAISSINIA ET AL. | |
| | Examiner Andrew W Wahba | Art Unit 2661 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9,10,13,14 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 3,4,7,8,11,12,15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>07/08/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 6, 9, 10, 13, 14, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Marchok et al (US Patent 6,122,246).

With regard to claim 1, Marchok et al discloses a pilot tone search mode in which the receiver (subscriber unit) scans (receiving) the frequency range of bins transmitted by transmitter 97 looking for the bin containing the frequency tone (toneset) (column 5, lines 54-58). Each receiver seeks to recover any one of these tones (leaving other tones) (column 5, lines 35-36). In tone acquisition mode, the receiver 150 switches to a steady state tracking mode in which the phase locked loop is used to constantly maintain synchronism with the transmitter 97 (column 6, lines 2-5). As the receiver maintains synchronization with the transmitter, it is inherent that there is communication (transmitting) between the two nodes. Once the bin containing the pilot tone sub-symbol has been identified, the receiver makes a gross timing adjustment to receive the bin including the pilot tone sub-symbol in the correct predetermined bin location (column 5, lines 58-63). In this manner, the tone acts as applicant's access request burst.

With regard to claims 2 and 10, conversion between frequency domain and time domain is well known in the art.

With regard to claim 5, 17 and 18, Marchok et al discloses a pilot tone search mode in which the receiver (subscriber unit) scans (receiving) the frequency range of bins transmitted (sending) by transmitter 97 (central access point) looking for the bin containing the frequency tone (toneset) (column 5, lines 54-58). As the receiver maintains synchronization with the transmitter, it is inherent that there is communication (assigning at least one time slot) between the two nodes. Once the bin containing the pilot tone sub-symbol has been identified, the receiver (subscriber unit) makes a gross timing adjustment to receive the bin including the pilot tone sub-symbol in the correct predetermined bin location (column 5, lines 58-63). In this manner, the tone acts as applicant's access request burst.

With regard to claim 6, each receiver seeks to recover any one of these tones; therefore, there is access request information from other subscriber units (includes access request information) (column 5, lines 35-36).

With regard to claim 9, 13 and 14, Marchok et al discloses a pilot tone search mode in which the receiver scans the frequency range of bins transmitted by transmitter 97 looking for the bin containing the frequency tone (toneset) (column 5, lines 54-58). Each receiver seeks to recover any one of these tones (includes access request information) (column 5, lines 35-36). In tone acquisition mode, the receiver 150 switches to a steady state tracking mode in which the phase locked loop is used to constantly maintain synchronism with the transmitter 97 (column 6, lines 2-5). It is

inherent that a processor (MAC layer processor) performs the functions of the receiver, such as scanning and synchronization functions. A second processor would perform the functions of the transmitter, such as transmitting the bins. Once the bin containing the pilot tone sub-symbol has been identified, the receiver makes a gross timing adjustment to receive the bin including the pilot tone sub-symbol in the correct predetermined bin location (column 5, lines 58-63). In this manner, the tone acts as applicant's access request burst.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchok et al (US Patent 6,122,246).

With regard to claims 19 and 20, Marchok et al discloses a pilot tone search mode in which the receiver (subscriber unit) scans (causes reception) the frequency range of bins transmitted (causes transmission) by transmitter 97 looking for the bin containing the frequency tone (toneset) (column 5, lines 54-58). Each receiver seeks to recover any one of these tones (leaving other tones) (column 5, lines 35-36). In tone acquisition mode, the receiver 150 switches to a steady state tracking mode in which

the phase locked loop is used to constantly maintain synchronism with the transmitter 97 (column 6, lines 2-5). As the receiver maintains synchronization with the transmitter, it is inherent that there is communication (assignment of at least one time slot) between the two nodes. Once the bin containing the pilot tone sub-symbol has been identified, the receiver makes a gross timing adjustment to receive the bin including the pilot tone sub-symbol in the correct predetermined bin location (column 5, lines 58-63). In this manner, the tone acts as applicant's access request burst.

Marchok et al does not disclose a computer program product as well as the corresponding codes and computer-readable medium that stores the codes. Whether the functions performed by Marckok et al are performed by a computer program or by another means is an obvious modification as functions performed in hardware may also be performed in software.

Allowable Subject Matter

5. Claim 3, 4, 7, 8, 11, 12, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

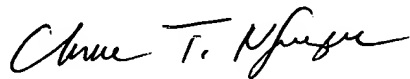
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth N Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba



September 30, 2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600